



Recycling of secondary raw materials for a sustainable **Optimization of construction processes** in civil **Engineering works**

THE GOALS

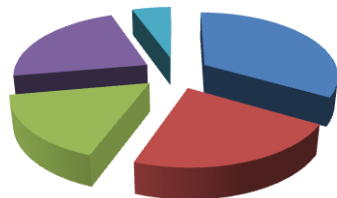
- ✓ Improve the link between research & application in civil engineering
- ✓ Consider all aspects of the value chain for SRMs, increasing their use in civil engineering
- ✓ Reduce the need of fresh geomaterials and cement
- ✓ Introduce new processes and products
- ✓ Improve design strategies (e.g. design for deconstruction)

THE TEAM

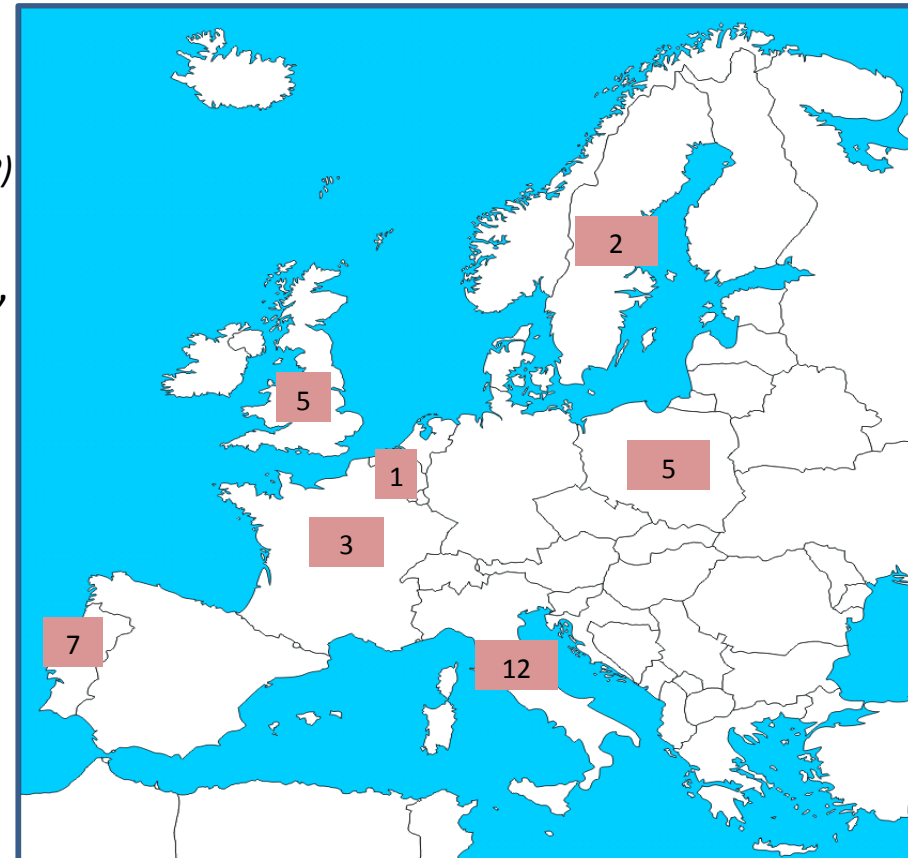
coord: **STRESS Ltd.**

(private-public partnership,
member of European Construction Technology Platform, ECTP)

- ✓ **35** partners from **7** countries
- ✓ Expertise from **civil** (geotechnical, structural, hydraulic, environmental) and **chemical engineering**, and contributions from **SMEs**, **large Enterprises** and **public bodies**



- Academia
- Large Enterprises
- SME
- Governmental/public body
- Other





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SRM

WASTE GEOMATERIALS (large disposed volumes)

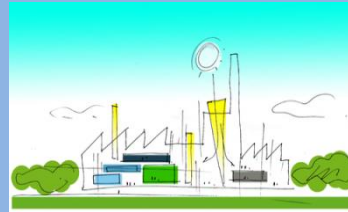
- Dredging tailings
- Construction and demolition materials
- Mining Tailings



INDUSTRIAL WASTE

- Fly ash
- Plastic Fibres
- Paper Fibres
- Textile Fibres

PROCESS



C_ENG APPLICATION

Geotechnical applications:

- Jet grouting
- Deep mixing
- Low pressure grouting
- Reinforced embankments
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Structural components:

- Bricks
- Panels
- Facing elements
- Special components (e.g. artificial blocks for coastal protection)
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Take advantage of good knowledge of mechanisms and processes at lab scale

Calls of interest: WASTE-4d-2015, CSA, Raw materials partnerships
WASTE-6b-2015, R&IA, Eco-innovative strategies